

## Inside EPA - fracking discharge regs

**Peggy Livingston** to: gillespie.colleen, Lai.Elaine, Bruce Kent, Robert Shankland, Pooja Parikh, volk.everett, Tricia Pfeiffer, Nathan Wiser

05/13/2011 10:25 AM

From: Peggy Livingston/R8/USEPA/US

To:

---

Attorney-Client Privileged

Attorney Work Product

This is from today's Inside EPA. Never mind if you already had it.

From Inside EPA, May 13, 2011

# EPA Weighs New Clean Water Regulations For Fracking Operations

Posted: May 12, 2011

EPA is weighing two new clean water discharge regulations that would address concerns about water pollution stemming from hydraulic fracturing, or “fracking,” operations, including a measure to subject the facilities to effluent limits and a regulation setting discharge limits on chloride, a pollutant commonly produced by the extraction process.

Ephraim King, director of the Office of Science & Policy in EPA's water office, told a meeting of wastewater officials May 11 that EPA is considering two regulations that are pertinent to shale gas extraction: listing the operations as a source category subject to technology-based effluent limits, under the Clean Water Act (CWA) section 304m, and creating a risk-based criteria for chloride, a contaminant that pollutes the produced water resulting from the operations.

At the same time EPA is stepping up its oversight of state water quality programs to ensure they adequately regulate the sector's discharges. EPA Region III officials sent a to Pennsylvania environment officials seeking a host of steps to ensure the state – which many consider to be the test case for how EPA will regulate the practice – is adequately regulating the discharges.

The agency's actions come after EPA wastewater chief Jim Hanlon said in a that state and regional regulators are struggling to permit municipal wastewater treatment plants (POTWs) that accept contaminated releases from gas drilling operations, a move that one utility source says shows the agency is seeking to direct the releases to more-heavily regulated industrial treatment plants.

Similarly, Pennsylvania officials announced April 19 that they were ordering drillers to end the practice of delivering wastewater to 15 facilities that are currently accepting it in the Keystone State,

and noted a 30-day deadline for compliance.

At issue are increasing concerns over so-called “produced water” resulting from the rapidly-expanding hydraulic fracturing industry in the 10-state region covered by the Marcellus Shale formation and beyond. In most western states, fracking wastewater is disposed of in underground wells and reservoirs, which are generally permitted under EPA's underground injection control program. But in eastern states like Pennsylvania, West Virginia and New York, those options are not available, and those states are seeing an increased number of requests from industry to discharge their wastewater to POTWs and centralized waste treatment (CWT) plants.

But a recent Pennsylvania study found high levels of contaminants downstream from a plant that treated only wastewater from fracking wells, signaling that even the push to send the wastewater to industrial facilities may be inadequate.

## **Two Measures**

At the May 11 meeting of the National Association of Clean Water Agencies, King noted two measures for EPA to strengthen regulation of wastewater discharges from fracking.

The first is a pending plan under CWA section 304(m), the provision of the law that governs EPA's program setting technology-based effluent limitations guidelines (ELGs). EPA has previously proposed listing drilling operations as a source category subject to ELG requirements and King says the agency is preparing to finalize its plan sometime this summer.

King said that if the agency decides to subject drilling operations to ELGs it would be of interest to POTWs because the discharges contain high levels of chlorides and other pollutants that the facilities must treat. “We do not have national standards for high chloride, shale gas produced waters that either go to centralized waste treatment or they go to... municipal wastewater treatment centers, King said.

POTWs, he noted, accept “very substantial amounts of shale gas produced water from a shale gas extraction operation. There is not an insignificant concern” because the high chloride levels interfere with the treatment plants' operations, causing “very significant water quality impacts.”

The agency plans to make a decision in the next month or two, King said, about whether to list shale gas extraction for guidelines and standards, which would lead to a final rule likely in 2013 or 2014, King said.

In addition to the 304(m) listing, King said at the May 11 meeting that EPA is “also taking a look at criteria for chloride,” which also links to shale operations.

King said EPA needs to “help POTWs with internal standards and help them to determine what they ought to be asking of shale gas operators, particularly when faced with large tank trucks full of produced water for treatment.

“This one goes to the issue of the receiving water,” King said. “So what comes out of the POTW, what comes out of the even a direct discharge... we're going to be doing a chloride water quality criteria to define what the receiving water needs to see if we want to maintain aquatic health.”

EPA will release that criteria for comment in the Fall, King said, to be finalized in March 2012.

### **Pennsylvania's Program**

Meanwhile, EPA is urging Pennsylvania to take a series of steps to strengthen its regulation of wastewater from fracking operations.

Region III Administrator Shawn Garvin sent a to Pennsylvania's acting environment secretary, Micheal Krancer, in response to the state's April 19 announcement urging drillers to limit their discharges to POTWs. Garvin asked for written confirmation from drillers that they have stopped discharging produced water to the 15 POTWs to determine whether the POTWs are still subject to EPA-administered pre-treatment requirements.

Garvin indicated that EPA is seeking the notification to ensure that “modifications to the prior wastewater disposal practices should be legally enforceable to the greatest extent possible.” As a result, EPA is urging Pennsylvania's Department of Environmental Protection (DEP) to prioritize modifying or reissuing permits for POTWs and CWTs that are still accepting shale wastewater “to include proper permit conditions and effluent limitations for the pollutants of concern.” Permits for facilities not accepting wastewater should also be modified to reflect that.

EPA also indicates that it may craft new pretreatment requirements for the POTWs.

EPA also says it will work with the state in its upcoming triennial review of water quality standards to ensure “pollutants of concern from gas drilling are fully considered in Pennsylvania's standards.” In a to the state, EPA recommends DEP determine whether its standards are adequate for chlorides, bromides, total dissolved solids and radionuclides.

Related News: 2363808

Peggy Livingston  
Senior Enforcement Attorney  
1595 Wynkoop Street  
Denver, CO 80202-1129  
303-312-6858 (phone)  
303-312-7202 (fax)